Toxics Cleanup Program

Contact: Jim Pendowski, Program Manager, (360) 407-7177

Program Mission

To get and keep contaminants out of the environment.

Environmental Threats

The agency has identified nearly 10,000 contaminated sites in Washington. Roughly 6,000 of these are the result of underground storage tanks leaking into the environment and contaminating the soil and/or ground water.

Contamination at each site is unique and can pose a different type and level of risk to public health and the environment. For example:

- Soils contaminated by arsenic and covering several miles have been discovered in school playgrounds, parks, and backyards, as well as at industrial facilities.
- Fish and shellfish living near chemically contaminated sediments can retain toxins in their systems and expose people to toxins when eaten. Contaminated sediments can also contribute to declining fish populations.
- Contamination can expose people to chemicals in the water they drink and use at home.

Cleaning up contaminated sites protects human health and the environment. It's also important to note that restoring contaminated property and putting it back into productive use preserves undeveloped lands, enhances redevelopment and reduces further declines in state resources such as fish and shellfish habitat.

Authorizing Laws

- *Chapter 70.105D RCW, Model Toxics Control Act*
- *Chapter 90.76 RCW, Underground Storage Tanks*
- *Chapter 90.48 RCW, Water Pollution Control Act*
- *Chapter 90.71 RCW, Puget Sound Water Quality Protection*

Constituents/Interested Parties

An important element of the Model Toxics Control Act (MTCA) is including the public and other interested parties throughout the process of cleaning up contaminated sites and developing new initiatives. The agency continues to build partnerships among government, industry, and citizens. Constituents interested in cleaning up contaminated sites include:

- *The Legislature*
- *State, federal, and local governments*
- *Conservation and environmental groups*
- *Business and individuals engaged in the cleanup of contaminated sites*
- *Ports*
- *Insurance companies*
- *Tribes*
- *Lenders, developers, realtors*
- *Owners of contaminated sites*
- *Water purveyors*
- *Citizens interested in, living near, or affected by contaminated sites*
- *Tank owners/operators*
- *Homes and businesses affected by leaking underground storage tanks*
- *Petroleum companies*
- *Underground storage tank service providers*

Major Activities and Results

Clean the Worst Contaminated Sites First (Upland and Aquatic)

The agency protects public health and natural resources by cleaning up and managing contaminated sites. Resources are first focused on cleaning up contaminated sites that pose the greatest risk to public health and the environment. This includes sites where contamination threatens drinking water, exists in a large quantity, is very toxic, may affect a water body, or may affect people that are living, working, or recreating near the site. Contamination may be in the soil, sediments, underground water, air, drinking water, and/or surface water.

For sediment sites, this includes addressing the environmental health of aquatic sediments in source control permits, managing sediment standards and regulations, and maintaining a sediment information database. The agency also manages multi-agency sediment cleanup projects. The cleanup of contaminated aquatic sediments reduces toxic contamination in food fish and protects the aquatic environment. The cleanup of these sites protects public health, safeguards the

environment, and promotes local economic development by making land available for new industries and other beneficial uses. (Authorizing laws - 70.105D, 90.48, and 90.71 RCW)

Result

The most highly contaminated sites are cleaned up, public and environmental health is protected, and sites are ready for redevelopment and job creation. The most highly contaminated marine sediments are cleaned up and managed to minimize public health and environmental impacts.

- Increase the number of sites cleaned up by over 3% annually (includes sites cleaned up voluntarily).
- Increase the number of sites with cleanup actions in progress.
- Decrease the number of sites that are waiting to be cleaned up.
- Increase the sediment acreage evaluated for source control, cleanup, or constructive purposes.

Whatcom Waterway

Manage Underground Storage Tanks to Minimize Releases

The agency currently regulates over 11,000 active tanks on over 4,000 different properties, including gas stations, industries, commercial properties, and governmental entities. The agency is working to ensure that tanks are installed, managed, and monitored in accordance with federal standards and in a manner that prevents releases into the environment. This is done through compliance inspections and providing technical assistance to tank owners and operators. Properly managing such tanks saves millions in cleanup costs and prevents contamination of limited drinking water and other ground water resources. (Authorizing law - 90.76 RCW)

Tank removal in Rosalia

Result

Underground storage tanks are properly installed, monitored, and/or decommissioned to minimize the release of oil, gas, and other toxic materials into drinking water and other underground water sources.

- Decrease the number of reported releases from underground storage tanks over time.
- Increase the number of leaking underground storage sites that are cleaned up or considered "No Further Action."
- Increase the percentage of underground storage tanks inspected that pass operational compliance for leak detection.

Services to Site Owners that Volunteer to Clean up their Contaminated Sites

The agency provides services to site owners or operators who initiate cleanup of their contaminated sites. Voluntary cleanups can be conducted in a variety of ways: completely independent of the agency; independently, with some agency assistance or review; or with agency oversight under a signed legal agreement (an agreed order or a consent decree). They may be done through consultations, prepayment agreements, prospective purchaser agreements, and brownfields redevelopment. Carrying out the voluntary cleanup program facilitates overall cleanup efforts by encouraging site owners to initiate and complete site cleanup. It also minimizes the need to have public funding used for such cleanup, and promotes local economic development through new industries and other beneficial uses of cleaned properties. (Authorizing laws - 70.105D, 90.48, and 90.71 RCW)

Result
Contaminated sites are voluntarily cleaned up by site owners and prospective buyers using private funding.

- Increase the number of sites voluntarily cleaned up.
- Increase the number of sites with cleanup actions in progress.
- Decrease the number of sites that are awaiting cleanup.
- Increase the number of determinations made on final cleanup reports submitted by parties who voluntarily cleaned up sites.

Major Issues

Areas of Wide-Spread Contamination
In large areas of Washington State, land is contaminated with low-to-moderate levels of arsenic and lead. The contamination is from historical activities, including aerial deposition from smelters and the past use of lead arsenate pesticides. These areas are distinct from more typical cleanup sites because they cover several hundred acres to many square miles, and generally have lower contaminate levels. As Washington's population has grown, areas impacted have been developed into schools, child-care facilities, neighborhoods, and parks. These development activities have created pressures for cleanup and have raised health, environmental, and financial concerns.

The agency is working with state and local agencies to reduce or prevent exposure to soils that contain elevated levels of arsenic and lead. The agency currently is focusing on areas where young children are likely to be present on a regular basis (e.g. schools, child-care facilities, neighborhoods, parks).

Unexploded Ordnances at Federal Facilities
The Department of Defense has over 350 areas in this state that are currently or were formally used for purposes of defense. Of those 350-plus sites, known as Formerly Used Defense sites, 55 are known to have significant Unexploded Ordnance contamination on them (explosive weapons that did not explode). "Significant" means that they pose a threat to human health and the environment. These sites have the potential to contaminate groundwater. In some instances, injury, and even death has occurred when someone accidentally came into contact with an unexploded ordnance.

Burlington Northern-Santa Fee Skykomish Site
Skykomish is an isolated town of just over 200 people and one of the state's gateways into the Northern Cascades. This town is also home to one of the state's more complex cleanup sites.

Town of Skykomish

Contamination from a historic railroad maintenance and fueling station has leaked into the community's soils, groundwater, surface water, and sediments, both on and off the rail yard. Petroleum has been seeping into the Skykomish River. Other contaminants include lead, arsenic, polychlorinated biphenyls (PCBs), and chemicals from incomplete combustion of materials at the site. Contamination remains beneath much of the town itself, and the agency has been working with Burlington Northern on solutions to clean up the contamination.

Abandoned Mine Sites
Historically, Washington State has seen extensive mining throughout its 68 mining districts. Although the exact number of abandoned mine sites in Washington is not known, one estimate indicates there may be as many as 3,500. Of these, it is estimated that approximately 500-600 are considered to have significant contamination. Contaminants consist largely of metals such as arsenic, lead, copper, cadmium, and zinc. Work at associated mills where the ore was processed may contain cyanide and mercury contamination. Future activities will focus on the identification and prioritization of abandoned mine lands and the short- and long-term actions needed, including cleanup. While this will make the work load more manageable, it will still be a major challenge for the agency, since some of these sites will likely

require treatment of acid mine drainage for hundreds of years. There are a large number of government agencies that may have ties to lands with abandoned mines. Some governing agencies are trustees and not land owners, which will create issues of site cleanup and responsibility for cleanup.

Holden Mine entrance

Record levels of Funding for Remedial Action Grants

Remedial Action Grants provide dollars to local governments to clean up contaminated sites. Local governments include towns, cities, school districts, fire districts, public utility districts, and port districts. The demand for these local toxics grant dollars has been increasing, and this is expected to continue. In the last couple years, the demand has exceeded the available dollars. However, this biennium, the agency will receive a record amount of dollars for these grants, and expects to fully fund all grant requests. The agency is working with local governments on priority cleanup sites. Currently, over 200 publicly owned contaminated sites are in the cleanup stage or awaiting cleanup. The majority of sites are located along industrial corridors, and include public works sites and ports.

Funding for Priority Cleanups: "Clean Sites III" and Orphan Sites

Among the nearly 10,000 contaminated sites that have been reported to the state, many no longer have an owner to pay for the cleanup costs. These sites are referred to as "orphan sites." To get these sites cleaned up, the agency has received funding specifically targeted for these orphan sites. This funding increases the agency's capacity to clean up these sites where the state is the only viable entity to conduct the cleanup.

Funds from the Clean Sites Initiative will also be used to partially meet state obligations for its share of cleanup costs incurred by the Environmental Protection Agency under the federal Superfund program.

Coeur d'Alene Basin/Spokane River Superfund Activities

Heavy metals from historic mining practices in the Coeur d'Alene basin of Idaho have affected the Spokane River for decades. This has resulted in fish consumption advisories, recreational use advisories for several upper Spokane River beaches, and consistent violations of Washington's water quality standards. In September 2002, the Environmental Protection Agency (EPA) released a legal decision document that identifies cleanup activities for the next 30 years in Idaho and in upper portion of the Spokane River. The states of Idaho and Washington, Coeur d'Alene and Spokane tribes, and federal agencies concurred with the decisions. The agency is working with the EPA on cleanup activities for Spokane River beaches that have been identified for cleanup.

Lake Roosevelt/ Upper Columbia River

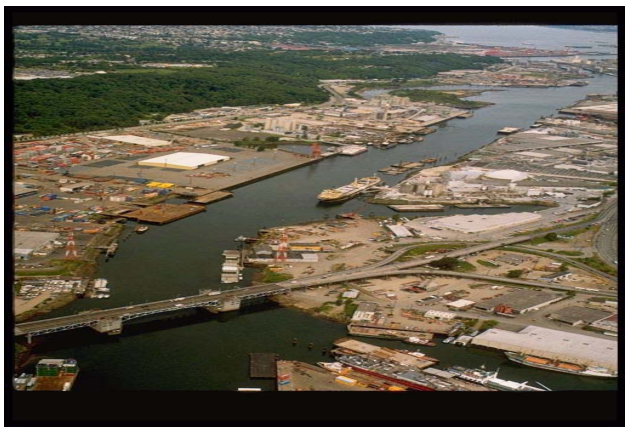
Lake Roosevelt, created by the construction of Coulee Dam, is the largest reservoir, by volume, in the state of Washington. It extends 150 miles from Grand Coulee Dam to the United States - Canada border. The reservoir is bordered by five counties and the Colville and Spokane Indian reservations. 1.5 million visitors a year recreate at the Lake Roosevelt National Recreation Area.

Metals such as zinc, cadmium, lead, copper, and mercury are present in Lake Roosevelt sediments at elevated concentrations. Studies have found metals and other chemicals at elevated levels in fish. Sources for metals in Lake Roosevelt include the Teck Cominco lead-zinc smelting complex at Trail, British Columbia. In 2003, the Environmental Protection Agency issued a Unilateral Administrative Order (UAO) to conduct a study determining the extent of contamination in the reservoir. Teck Cominco has not complied with the UAO. The Colville Confederated Tribes filed a citizens' suit under federal Superfund Program for failure to comply with the UAO, and the state of Washington is a plaintiff in support of the lawsuit. There are ongoing negotiations between Teck Cominco, the Colville Confederated Tribes, the Spokane Tribe,

and the state of Washington in an attempt to settle the lawsuit. In the meantime, the Environmental Protection Agency is conducting work to identify the extent of the contamination.

Lower Duwamish Waterway Cleanup
The agency is working with the Environmental Protection Agency (EPA) on a 5.5 mile stretch of the Lower Duwamish Water Way that is contaminated. Contaminated sediment cleanup and pollution source control are the key projects in the area. Contaminants include polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), metals, and others.

Many cleanup actions were completed during Phase 1 cleanup. Phase 2 cleanup is now underway, with collection of sediment and fish tissue data. Phase 2 also includes ecological and human health risk assessments, determination of what additional areas will need cleanup, and a feasibility study. The agency leads source control activities with the City of Seattle, Port of Seattle, King County, and EPA. Source control is currently focused on stormwater and combined sewer overflow drainages.



Lower Duwamish Waterway Cleanup

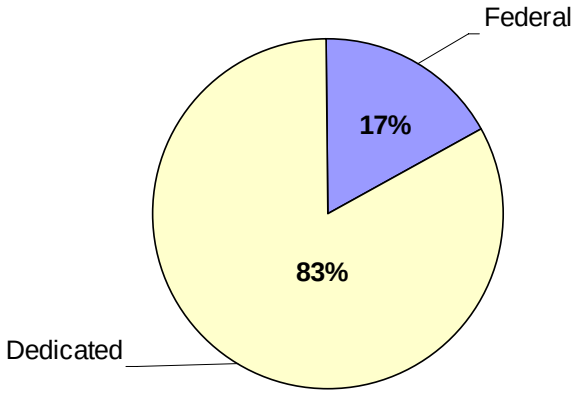
Superfund Site Transfers to the State
Under federal law, Washington is required to operate and maintain Superfund financed cleanup remedies after a remedy is determined by the Environmental Protection Agency (EPA) to be "operational and functional." The amount of time for EPA to make this determination is one year for soil remedies and 10 years for groundwater remedies. After that time has lapsed, the state must fund and conduct operation and maintenance at Superfund sites with a completed cleanup. The agency will need increased funds and staff to conduct the operation and maintenance at these sites. In addition, difficult decisions about the completeness of any given remedy will need to be agreed upon by the EPA and the state. This can become more important at larger, more costly sites, like the Wyckoff site on Bainbridge Island.

Toxics Cleanup Program Budget

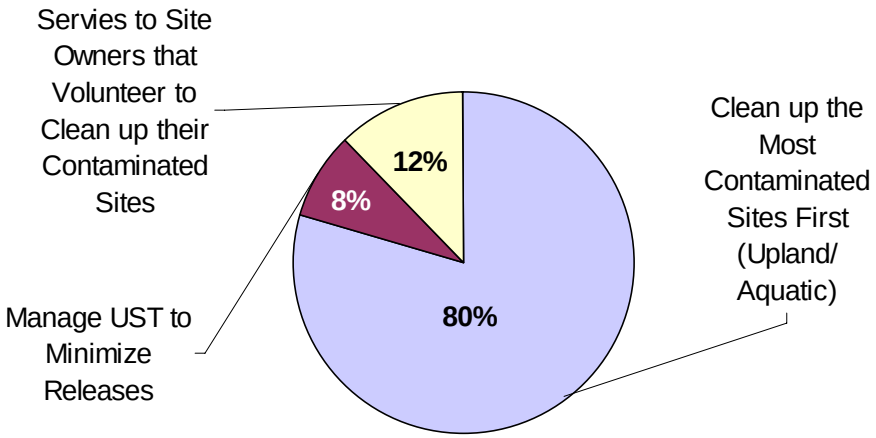
Budget = $41.5 million; FTEs = 144

Federal	($) Amount	Sources	Uses
General Fund – Federal	7,145,203	Federal Grants	Grants funds received from EPA and Dept. of Defense for cleanup at National Priorities List sites and federal Superfund sites at military facilities and technical assistance/cleanup related to leaking underground storage tanks.
Dedicated Funds			
State Toxics Control Account – includes $2M of STCA Capital	28,263,653	Hazardous substance tax; recovered remedial actions and penalties collected	Clean up toxic sites, investigate and rank new toxic sites, prepayment cleanup, technical assistance, site information management, and natural resource damage assessment.
State Toxics Control Account – Private/Local	356,444	Recovered LUST (Leaking Underground Storage Tank) dollars from Federal Grants.	Activities related to the cleanup of leaking underground storage tanks.
State Underground Storage Tank Account	2,531,473	Annual tank fees	Pollution prevention, inspection, and permitting activities related to underground storage tanks.
Worker/Community Right to Know Account	995,772	Hazardous Material Manufacturing	Public information compilation and dissemination.
Local Toxics Control Account	1,110,632	Hazardous Substance Tax	Technical assistance, oversight, and administration of the Local Toxics Control Account Remedial Action Grant Program.
Water Quality Permit Account	1,079,820	Fees on Wastewater Discharge	Sediment source control
TOTAL	**$41,482,997**		
Capital Budget Funding:			
State Toxics Control New Appropriation	$2,000,000	Hazardous substance tax	Safe soil remediation and awareness on lead reduction in schools.

Toxics Cleanup Program
Dollars by Fund Source



Toxics Cleanup Program
Dollars by Activity



Activity	Dollars	FTEs
Clean up the Most Contaminated Sites First (Upland and Aquatic)	32,922,998	102.2
Manage Underground Storage Tanks to Minimize Releases	3,499,999	17.0
Services to Site Owners that Volunteer to Clean up their Contaminated Sites	5,060,000	24.8
Total Toxics Cleanup Program	**$41,482,997**	**144.0**